

ST-S3000ES

SERVICE MANUAL

AEP Model



SPECIFICATIONS

FM tuner section

Frequency range 87.5 - 108.0 MHz

Aerial terminals 75 ohms,
unbalanced
IEC-male

Intermediate frequency 10.7 MHz

Sensitivity at 26 dB quieting
(mono) 10.3 dBf,
0.9 μ V/75 Ω
at 46 dB quieting
(stereo) 38.5 dBf,
23 μ V/75 Ω

Usable sensitivity (IHF) 10.3 dBf, 0.9 μ V/
75 Ω

S/N at 40 kHz deviation :
80 dB (mono),
76 dB (stereo)

Harmonic distortion at 40 kHz deviation :
WIDE
0.04 % (mono),
0.05 % (stereo)
NARROW
0.06 % (mono),
0.08 % (stereo)

Frequency response 30 Hz - 15 kHz
(+0.2/-0.3 dB)

Separation 50 dB at 1 kHz

Selectivity at 400 kHz
WIDE 80 dB
NARROW 90 dB
at 300 kHz
WIDE 45 dB
NARROW 70 dB

Output at 40 kHz deviation
600 mV

AM tuner section

Frequency range MW: 522 - 1,611 kHz
(9 kHz step)
LW: 144 - 288 kHz
(1 kHz step)

Intermediate frequency 450 kHz

Usable Sensitivity (with AM loop
aerial)
MW: 200 μ V/m
LW: 700 μ V/m

Signal-to-noise ratio MW: 54 dB
(50 mV/m,
999 kHz)
LW: 50 dB
(50 mV/m,
216 kHz)

Harmonic distortion 0.3% (50 mV/m,
400 Hz)

Selectivity 50 dB

General

Power requirements 220-230 V, AC
50/60 Hz

Power consumption 12 W

Dimensions 280 x 80 x 400 mm
(w/h/d)

Weight 4.3 kg

Supplied accessories Audio cord (1)
AM loop aerial (1)
FM wire aerial (1)

Design and specifications are subject to
change without notice.

FM STEREO FM-AM TUNER



SONY®

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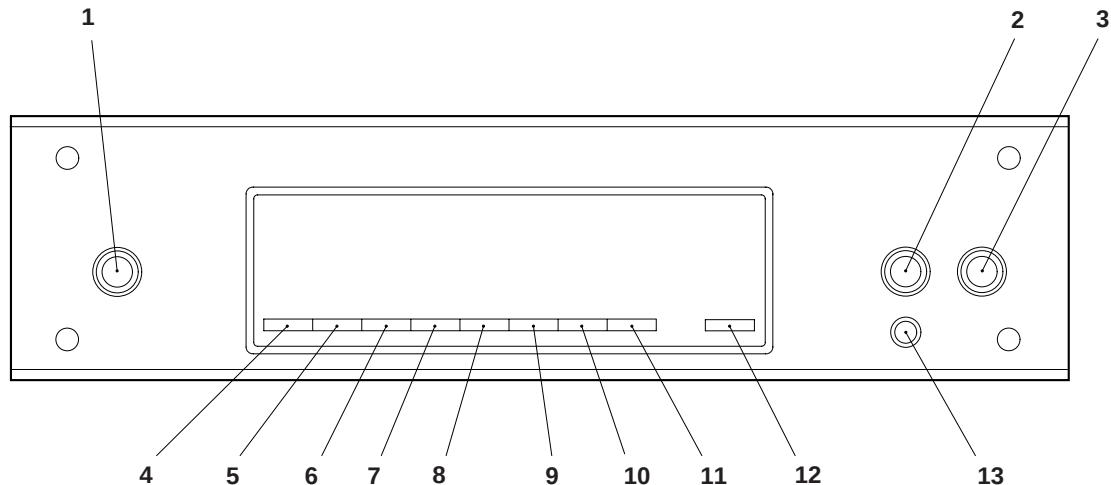
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SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK $\triangle$ OR DOTTED LINE WITH MARK $\triangle$ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1 GENERAL

Location of Parts and Controls



- | | |
|-------------------------|-----------------------------|
| 1 POWER button | 8 MEMORY button |
| 2 TUNING/SELECT- button | 9 MENU ENTRY MENU button |
| 3 TUNING/SELECT+ button | 10 MENU ENTRY RETURN button |
| 4 DISPLAY button | 11 MENU ENTRY ENTER button |
| 5 CHARACTER button | 12 TUNE MODE button |
| 6 ANTENNA button | 13 SHIFT button |
| 7 BAND button | |

SECTION 2 TEST MODE

1. Circuit Check Mode

Set to the reception frequency that the circuit can STEREO RDS stations. (Set the input level to above 70 dB.)

This enables circuit check to be performed in any of the reception modes-FM, AM (MW, LW). Set to a desired band before setting the test mode.

1. Turn OFF the power.
2. While pressing **ENTER** and **BAND** together, turn ON the power.

- The items in the following table will be checked automatically in order every 2 seconds.

Display	Items	DISPLAY		NG
		FM RDS	AM (MW, LW)	
Tuned	AST signal =LOW	OK or NG		IC251 NG, RV251 adjustments
IF Frq	IF COUNT OK	OK or NG	OK or NG	FE101, IC251 NG, or IF count buffer amp (Q251, Q401) NG
Sig Level	SI LEVELh70dB	OK or NG	OK or NG	IC221 NG, RV221 adjustments
Stereo	ST signal=LOW	OK or NG		IC301 NG, RV301 adjustments
RDS Signal	RDS DATA OK	OK or NG		IC801 NG

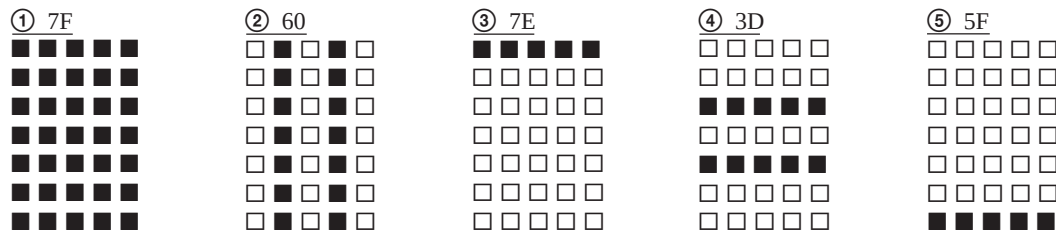
NOTE : The preset data will be erased when this test mode is used. Therefore, take down the data before setting this mode and preset the data again after completing operations in this mode.

2. FLUORESCENT INDICATOR TUBE Check and KEY Check mode

1. Turn OFF the power.
2. While pressing **ENTER** and **RETURN** together, turn ON the power.
3. While continuously pressing **ENTER** and **RETURN** together, check the following.

Microcomputer version indication (1 sec) → All light up “7F” → Dot area only “60” → Dot area only “7E”
 ↑ Dot area only “5F” ← Dot area only “3D”

Indication test pattern



* The indication test patterns from ② to ⑤ are indicated on only even grids.

The display changes every 1 sec.

4. Release **ENTER** and **RETURN** . The KEY CHECK mode will be set.
5. All key numbers will be displayed.
Key Number : 12
6. Each time the key is pressed, the key number will be counted down.
Each key will be counted only once, at the first time.
7. When all keys have been pressed, the process will end.

NOTE : As contents of the Factory Preset will be written into memory after completing this check mode, delete contents of memory according to 4. Forced RESET.

3. Entering the Factory Preset (In case perform just to write memory of the Factory Preset.)

1. Turn OFF the power.
2. While pressing **ENTER** and **MEMORY** together, turn ON the power.

4. Forced RESET (Used to delete the contents of Factory Preset when it is written into the preset memory.)

Clears all the RAMs and sets the initial state

1. Turn OFF the power.
2. While pressing **ENTER** and **ANTENNA** together, turn ON the power.
3. When “All clear” is indicated on the display tube.

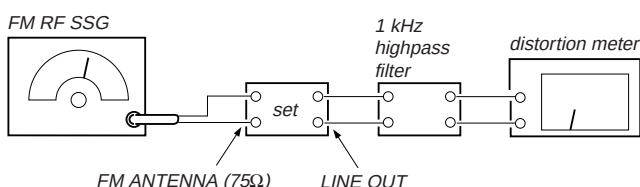
SECTION 3 ELECTRICAL ADJUSTMENTS

Precautions in Repairing

If the front end unit fails, it is difficult to repair the inner circuits, so replace the entire front end unit.

Set “IF : WIDE” after the all adjustments.

FM SECTION **0dB = 1μV**



- Standard Setting of FM Stereo RF Signal Generator.

STEREO STANDARD SIGNAL	MONAURAL STANDARD SIGNAL
Carrier frequency : 98MHz	Carrier frequency : 98MHz
Modulation : Audio 1kHz	Modulation : Audio 1kHz
Main channel (L+R) :33.75kHz deviation	75kHz deviation
Sub channel (L-R) :33.75kHz deviation	
Pilot :7.5kHz deviation	

How to switch IF BAND : WIDE/NARROW and ANT ATT : ON/OFF

Method:

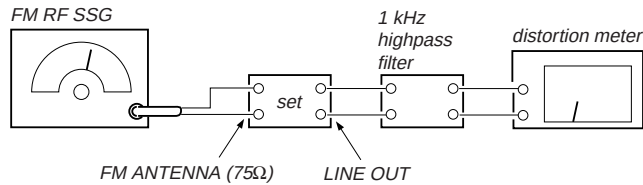
1. Press the power button to turn the power on and set to FM.
2. Press the MENU button and press the TUNING/SELECT -, + button to indicate “Reception” on the fluorescent display tube, then press the ENTER button.
3. Press the TUNING/SELECT -, + button to indicate “ATT/IF Band”, and press the ENTER button.
4. “ANT ATT: OFF” is indicated on the fluorescent display tube and press the TUNING/SELECT -, + button to indicate “ON” or “OFF”, then press the ENTER button.
When the ANT ATT is set, “ANT ATT” is indicated on the fluorescent display tube.
5. “IF: Wide” is indicated on the fluorescent display tube, and press the TUNING/SELECT -, + button to indicate “Wide” or “Narrow”, then press the ENTER button.
When the “IF: Narrow” is set, “NARROW” is indicated on the fluorescent display tube.
6. Set WIDE after the operation.

FM Discriminator ADJUSTMENT (NULL and MONO Distortion Adjustment)

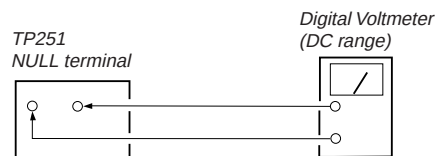
Setting :

IF BAND : WIDE

ANT ATT : OFF



Modulation: Monaural Standard signal
Output level: 6mV (76dB) (at 75Ω open)



Procedure :

1. Tune the set to 98 MHz.
2. Adjust IFT252 for 0V reading on the digital voltmeter.
..... NULL
3. Adjust IFT253 for a minimum reading on the distortion meter.
..... MONO Distortion (THD)
4. Repeat the adjustments of 2 and 3 several times.

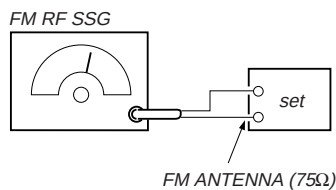
Note : When replacing the ceramic filter, perform this alignment.

Stereo Level Adjustment

Setting :

IF BAND : WIDE

ANT ATT : OFF



Modulation: Stereo Standard signal
Output level: 18μV (25dB) (at 75Ω open)

Procedure :

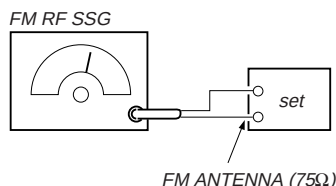
1. Tune the set to 98 MHz.
2. Adjust RV251 to the point (moment) when the “STEREO” indicator will change from going off to going on.

Narrow Gain Adjustment

Setting :

IF BAND : NARROW

ANT ATT : OFF



Modulation: Stereo Standard signal
Output level: 18μV (25dB) (at 75Ω open)

Procedure :

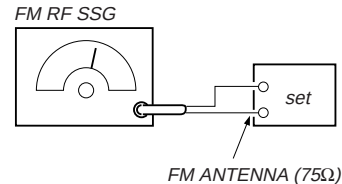
1. Tune the set to 98 MHz.
2. Set “IF BAND : NARROW” according to the procedure of “How to switch IF BAND WIDE/NARROW” on page 6.
3. Adjust RV231 to the point (moment) when the “STEREO” indicator will change from going off to going on.

FM Meter Level Adjustment

Setting :

IF BAND : WIDE

ANT ATT : OFF



Modulation: Stereo Standard signal
Output level: 3mV (76dB) (at 75Ω open)

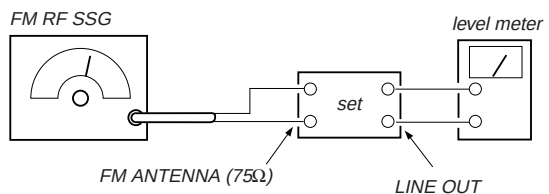
Procedure :

1. Tune the set to 98 MHz.
2. Press DISPLAY button to display the digital signal, then adjust RV221 to be displayed as “SIG 70dB”.

Stereo Separation Adjustment

Setting :

IF BAND : WIDE



Modulation: Stereo Standard signal
Output level: 6mV (76dB) (at 75Ω open)

Procedure :

1. Refer to “How to switch IF BAND WIDE/NARROW” on page 6.

FM stereo Signal generator Output channel	Level meter connection	Level meter reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV301 for minimum reading on Level meter
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV301 for minimum reading on Level meter

L-CH Stereo separation : Ⓐ - Ⓑ

R-CH Stereo separation : Ⓒ - Ⓓ

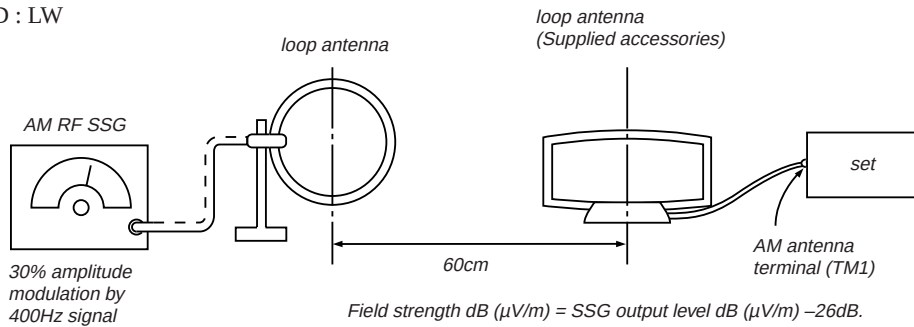
The separations of both channels should be equal.

AM SECTION

AM Meter Level Adjustment

Setting :

BAND : LW



Carrier frequency: 216kHz

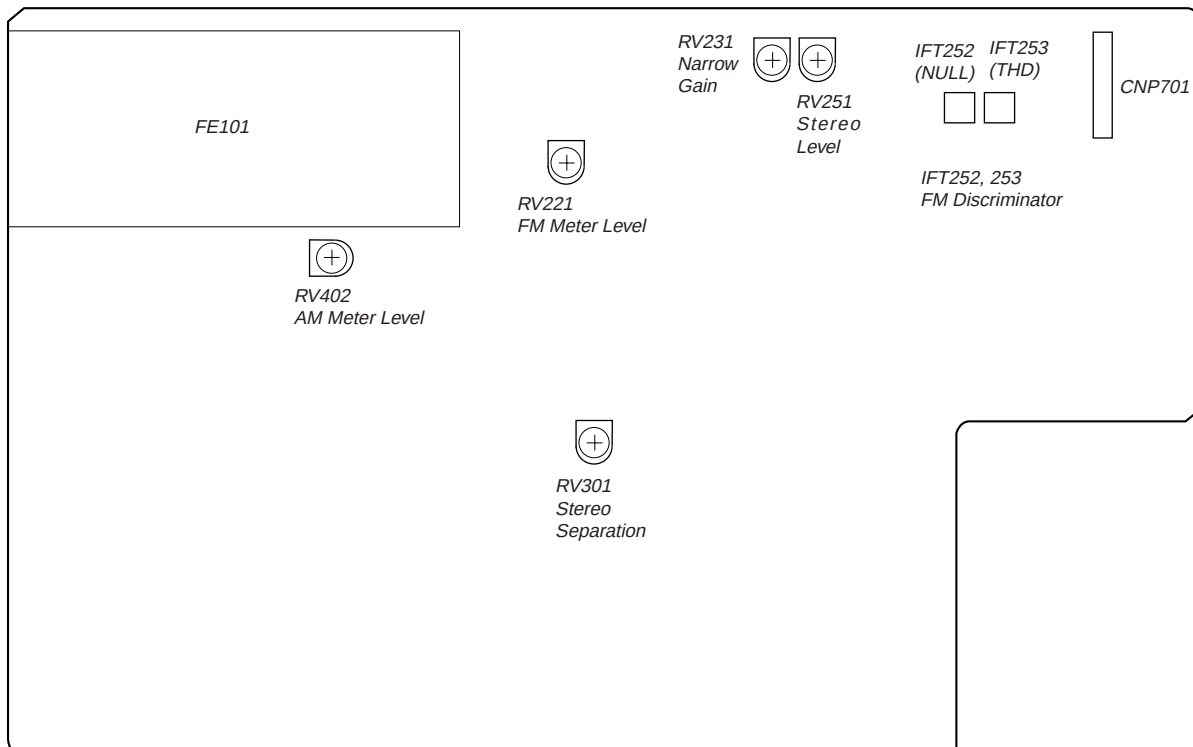
Modulation: AUDIO 400Hz, 30% modulation

Procedure :

1. Set AM RF signal generator so that the AM antenna input level becomes 74dB μm .
2. Adjust RV402 so that 1 to 10 indication bars light up on the signal meter.

Adjustment Location

[MAIN BOARD] — Component Side —



SECTION 4 DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

NOTE

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : Pattern from the side which enable seeing.

NOTE

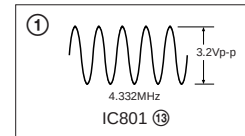
- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : Internal component.
- : nonflammable resistor.
- : panel designation.

Note: The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

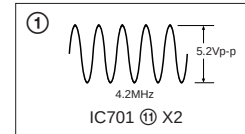
- B+ : B+ Line
- B- : B- Line
- : adjustment for repair
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark : FM
- MW : ()
- LW : < >
- * : Can not be measu
- Voltages are taken with a VOM (Input impedance 10M Ω).
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- : FM
- : AM

4-1. WAVEFORMS

MAIN SECTION

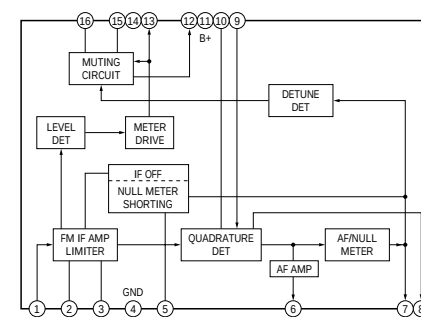


DISPLAY SECTION

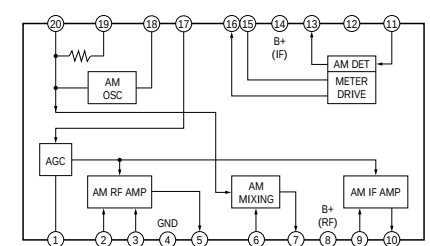


4-2. IC BLOCK DIAGRAMS

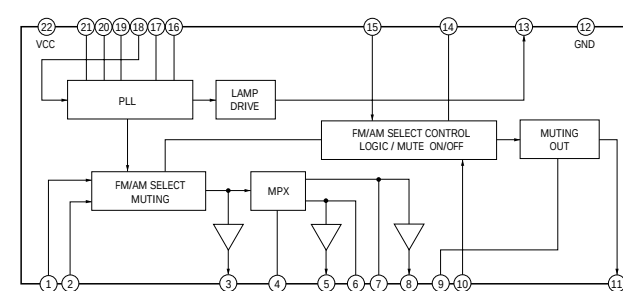
IC221, 251 LA1235



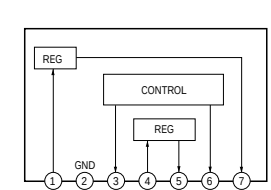
IC401 LA1245



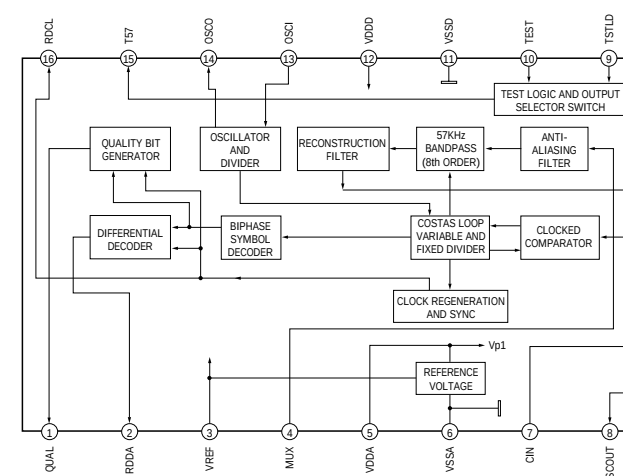
IC301 LA3401

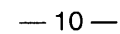


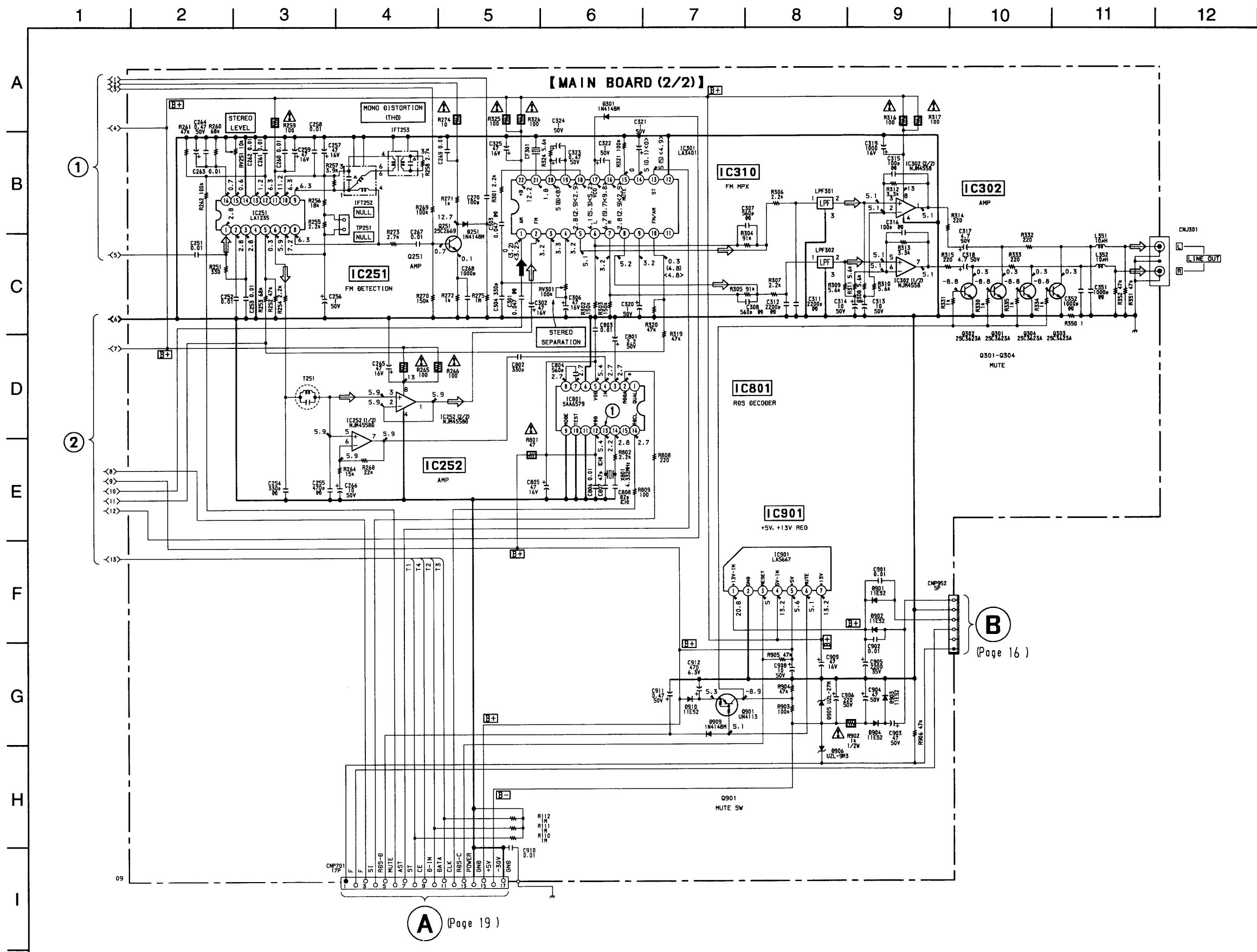
IC901 LA5667



IC801 SAA6579





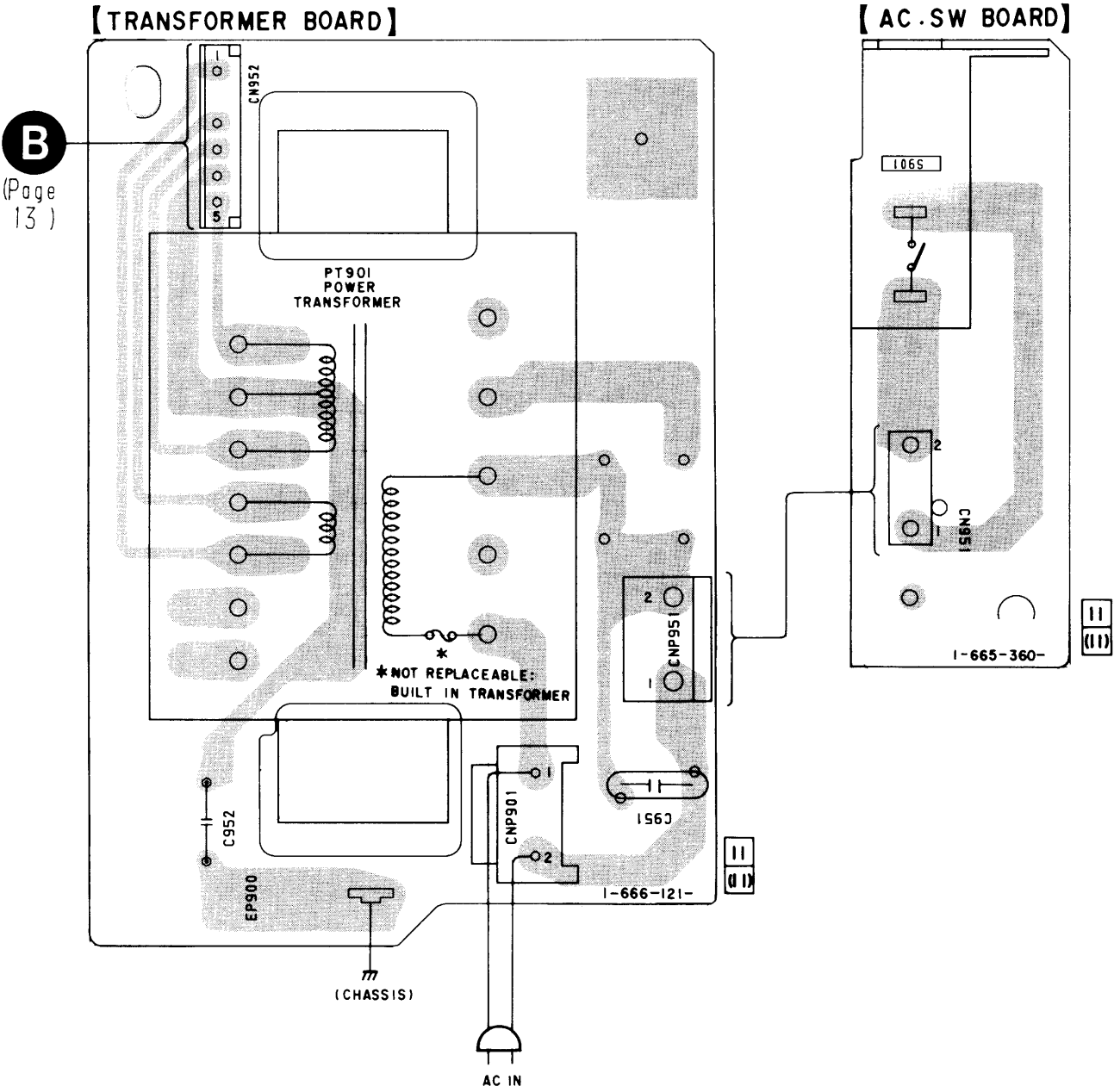




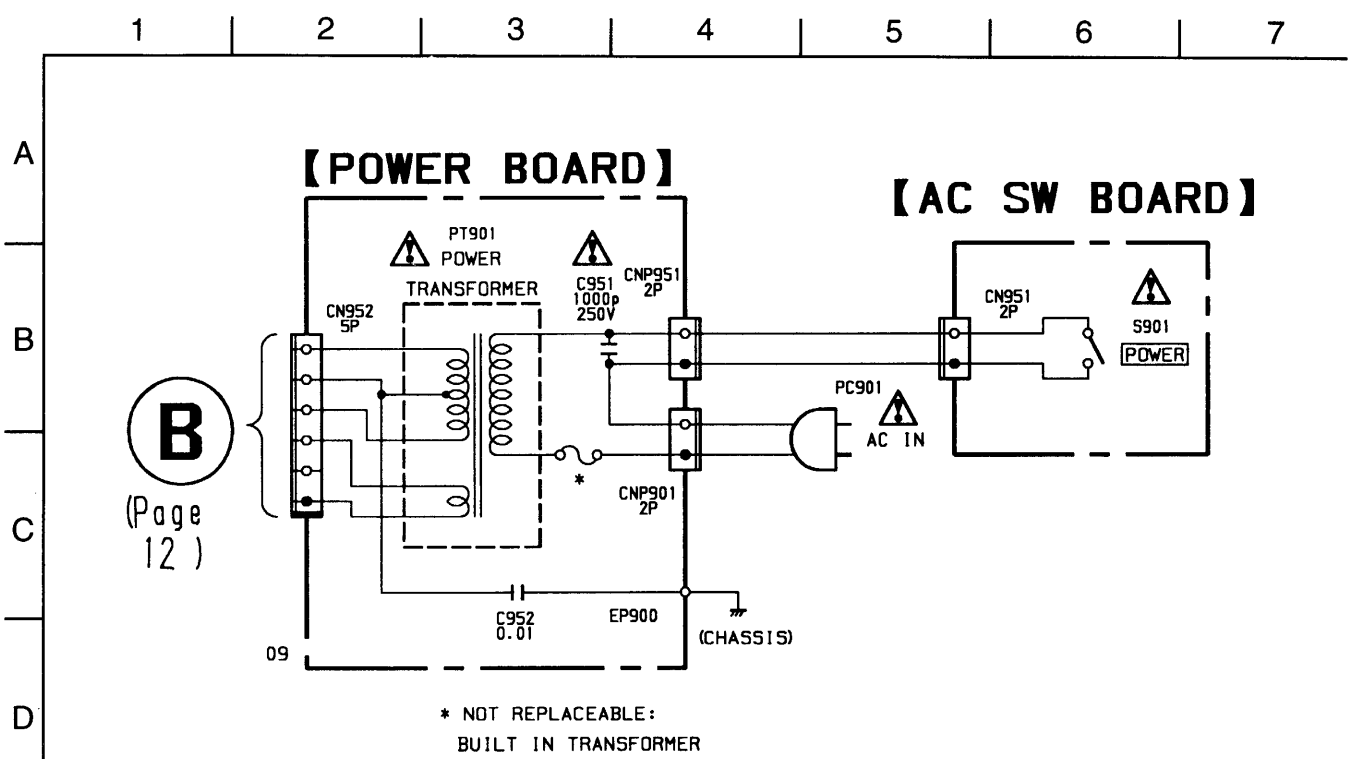
Ref. No.	Location
D221	C-8
D251	B-2
D301	D-6
D401	D-15
D402	D-12
D901	G-5
D902	G-5
D903	H-5
D904	H-5
D905	H-5
D906	F-4
D909	H-13
D910	F-15
IC221	B-9
IC251	B-5
IC252	E-6
IC301	E-7
IC302	H-9
IC401	E-13
IC801	E-5
IC901	G-13
Q200	D-9
Q201	A-7
Q202	A-7
Q204	A-7
Q205	A-6
Q231	B-7
Q232	C-7
Q233	C-7
Q234	B-5
Q235	C-6
Q236	C-5
C237	B-6
Q251	B-3
Q301	H-9
Q302	H-10
Q303	H-8
Q304	H-8
Q401	E-11
Q402	D-15
Q403	E-15
Q404	D-14
Q405	D-14
Q521	H-12
Q522	G-12
Q523	H-12
Q901	I-15

These are omitted

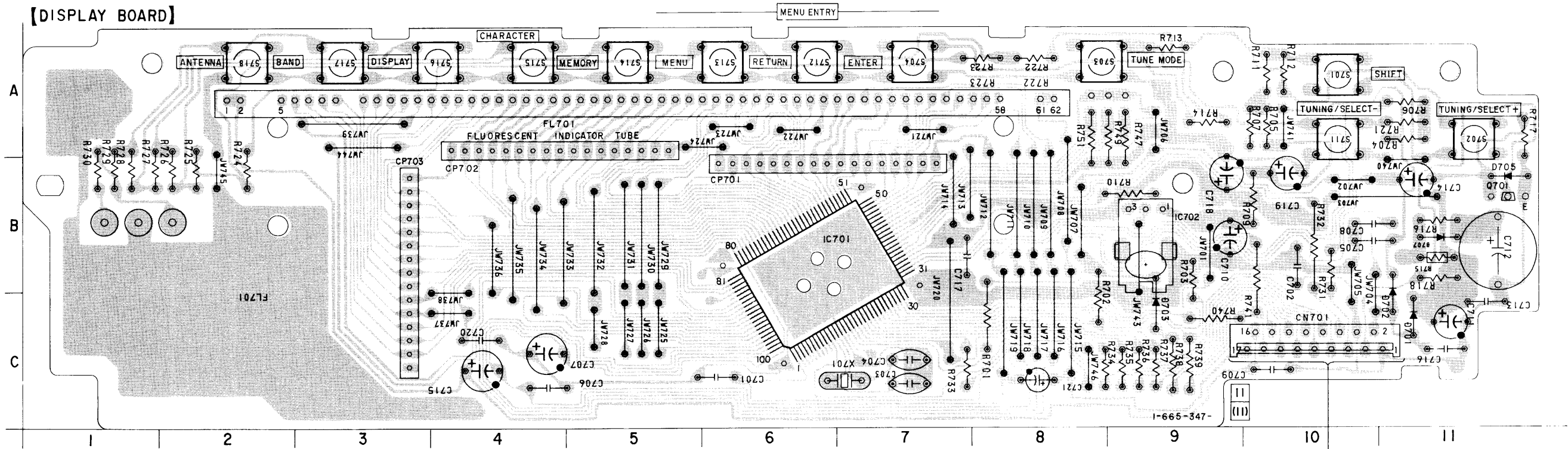
4-5. PRINTED WIRING BOARD — POWER BOARD SECTION —



4-6. SCHEMATIC DIAGRAM — POWER BOARD SECTION —



4-7. PRINTED WIRING BOARD — DISPLAY SECTION —



A (Page 13)

• Semiconductor Location

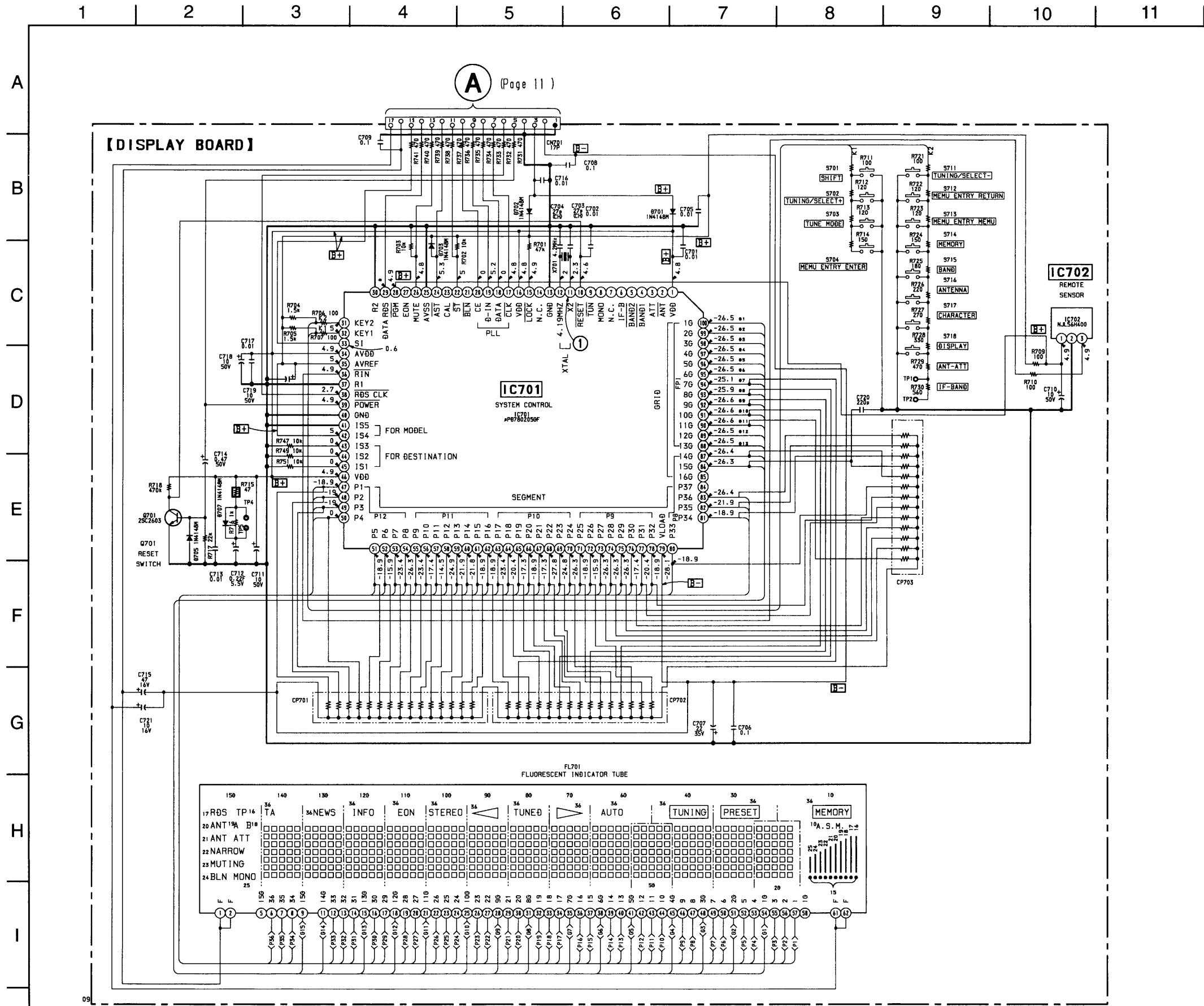
Ref. No.	Location
D701	C-11
D702	C-11
D703	C-9
D705	B-11
D707	B-11
IC701	B-6
IC702	B-9
Q701	B-11

• Indication of transistor

These are omitted

4-8. SCHEMATIC DIAGRAM — DISPLAY SECTION —

- See page 7 for Waveforms.
- See page 21 for IC Pin Functions.



4-9. IC PIN FUNCTION

• IC701 SYSTEM CONTROL (uPD780205GF)

Pin No.	Pin Name	I/O	Function
1	V _{DD}	—	Power supply (+5V).
2	$\overline{\text{ANT}}$	—	Not used.
3	ATT	—	Not used.
4	$\overline{\text{BAND1}}$	—	Not used.
5	$\overline{\text{BAND2}}$	—	Not used.
6	IF-B	—	Not used.
7	N.C.	—	Not used.
8	MONO	—	Not used.
9	TUN	—	Not used.
10	$\overline{\text{RESET}}$	I	System reset input.
11	X2	O	Oscillation signal output (4.19MHz).
12	4.19MHz	I	Oscillation signal input (4.19MHz).
13	GND	—	Ground.
14	N.C.	—	Not used.
15	$\overline{\text{LOCK}}$	I	Lock signal input.
16	V _{DD}	—	Power supply (+5V).
17	$\overline{\text{CLK}}$	O	PLL clock to FE101.
18	DATA	O	PLL data to FE101.
19	D-IN	I	PLL data from FE101.
20	CE	O	PLL latch to FE101.
21	$\overline{\text{BLN}}$	—	Not used.
22	$\overline{\text{ST}}$	I	Stereo display detection.
23	CAL	—	Not used.
24	$\overline{\text{AST}}$	I	Auto stop signal detection.
25	AV _{ss}	—	Ground. (Analog)
26	MUTE	O	Muting signal output.
27	EON	—	Not used.
28	$\overline{\text{PGM}}$	—	Not used.
29	DATA RDS	I	RDS data input.
30	R2	—	Not used.
31	KEY 2	I	Key input.
32	KEY 1	I	Key input.
33	SI	I	Signal input.
34	AV _{DD}	—	Analog power supply (+5V).
35	AV _{REF}	I	Reference voltage (+5V).
36	$\overline{\text{RIN}}$	I	Remote control input.
37	R1	—	Not used.
38	$\overline{\text{RDS CLK}}$	I	RDS data clock input.
39	POWER	I	Power supply ON/OFF monitor.
40	GND	—	Ground.

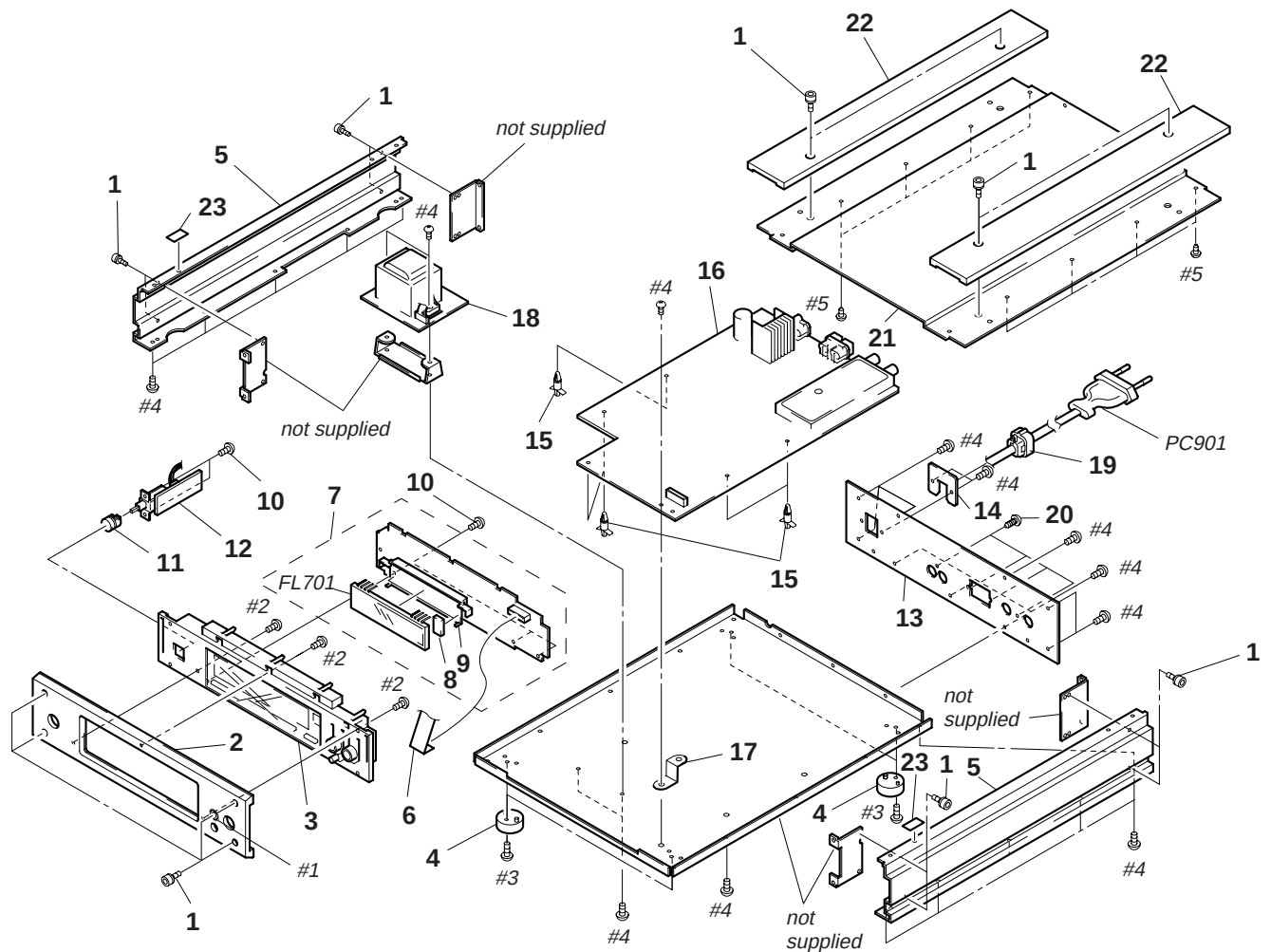
Pin No.	Pin Name	I/O	Function
41	IS 5	I	Model detection.
42	IS 4	I	
43	IS 3	I	
44	IS 2	I	
45	IS 1	I	
46	V _{DD}	—	Power supply (+5V).
47-78	P1-P32	O	Drives indication tube.
79	V LOAD	—	Power supply (−30V).
80-83	P33-P36	O	Drives indication tube.
84,85	P37.16G	—	Not used.
86-100	15G-1G	O	Drives indication tube.

SECTION 5 EXPLODED VIEWS

NOTE:

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety.
Replace only with part number specified.



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-960-910-31	SCREW, ORNAMENTAL		* 14	4-923-873-01	BRACKET, CORD STOPPER	
2	4-989-920-11	PANEL, FRONT		* 15	3-346-265-11	HOLDER, PC BOARD	
3	X-4948-552-2	PANEL (BASE) ASSY		* 16	A-4398-428-A	MAIN BOARD, COMPLETE	
4	X-4947-892-1	FOOT ASSY		* 17	3-332-563-01	BRACKET (P)	
* 5	4-986-466-01	BRACKET (SIDE)		* 18	1-666-121-11	TRANSFORMER BOARD	
6	1-773-040-11	WIRE (FLAT TYPE) (17 CORE)		* 19	3-703-244-00	BUSHING (2104), CORD	
* 7	A-4398-429-A	DISPLAY BOARD, COMPLETE		20	3-704-515-11	SCREW (BV/RING)	
* 8	4-921-941-01	CUSHION (FL)		* 21	4-986-255-01	PLATE, TOP	
* 9	4-945-292-01	HOLDER, INDICATION TUBE		* 22	4-986-468-01	PANEL (TOP)	
10	4-951-620-01	SCREW (2.6X8), +BVTP		23	3-703-929-01	SPACER, SWITCH	
11	X-4947-759-1	BUTTON ASSY, POWER		FL701	1-517-177-21	INDICATOR TUBE, FLUORESCENT	
* 12	1-665-360-11	AC.SW BOARD		$\triangle$ PC901	1-558-568-21	CORD, POWER	
* 13	4-989-921-12	PANEL, BACK					

SECTION 6 ELECTRICAL PARTS LIST

Note:

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F : nonflammable

- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA..., uPB...: μ PB...,
uPC...: μ PC..., uPD...: μ PD...
- CAPACITORS
uF : μ F
- COILS
uH : μ H

Ref. No.	Part No.	Description	Remark			
*	1-665-360-11	AC.SW BOARD *****				
< GROUND PLATE >						
EP900	4-957-933-01	PLATE, GROUND				
< SWITCH >						
△ S901	1-762-581-11	SWITCH, AC POWER PUSH (1 KEY)(POWER)				

*	A-4398-429-A	DISPLAY BOARD, COMPLETE *****				
*	4-921-941-01	CUSHION (FL)				
*	4-945-292-01	HOLDER, INDICATION TUBE				
< CAPACITOR >						
C701	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C702	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C703	1-102-516-11	CERAMIC	27PF	5%	50V	
C704	1-102-516-11	CERAMIC	27PF	5%	50V	
C705	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C706	1-164-159-11	CERAMIC	0.1uF		50V	
C707	1-124-248-00	ELECT	22uF	20%	35V	
C708	1-164-159-11	CERAMIC	0.1uF		50V	
C709	1-164-159-11	CERAMIC	0.1uF		50V	
C710	1-126-964-11	ELECT	10uF	20%	50V	
C711	1-126-964-11	ELECT	10uF	20%	50V	
C712	1-104-905-11	CAPACITOR	0.22F		5.5V	
C713	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C714	1-126-959-11	ELECT	0.47uF	20%	50V	
C715	1-124-589-11	ELECT	47uF	20%	16V	
C716	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C717	1-164-159-11	CERAMIC	0.1uF		50V	
C718	1-126-964-11	ELECT	10uF	20%	50V	
C719	1-126-964-11	ELECT	10uF	20%	50V	
C720	1-162-286-31	CERAMIC	220PF	10%	50V	
C721	1-126-157-11	ELECT	10uF	20%	16V	
< CONNECTOR >						
* CN701	1-568-836-11	SOCKET, CONNECTOR 17P				
< DIODE >						
D701	8-719-987-63	DIODE 1N4148M				
D702	8-719-987-63	DIODE 1N4148M				
D703	8-719-987-63	DIODE 1N4148M				

Ref. No.	Part No.	Description	Remark			
D705	8-719-987-63	DIODE 1N4148M				
D707	8-719-987-63	DIODE 1N4148M				
		< FLUORESCENT INDICATOR >				
FL701	1-517-177-21	INDICATOR TUBE, FLUORESCENT				
		< IC >				
IC701	8-759-483-96	IC uPD780205GF-034-3BA				
IC702	8-759-459-84	IC NJL56H400				
		< TRANSISTOR >				
Q701	8-729-620-05	TRANSISTOR 2SC2603-EF				
		< RESISTOR >				
R701	1-249-437-11	CARBON	47K	5%	1/4W	
R702	1-249-429-11	CARBON	10K	5%	1/4W	
R703	1-249-429-11	CARBON	10K	5%	1/4W	
R704	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R705	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R706	1-247-807-31	CARBON	100	5%	1/4W	
R707	1-247-807-31	CARBON	100	5%	1/4W	
R709	1-247-807-31	CARBON	100	5%	1/4W	
R710	1-247-807-31	CARBON	100	5%	1/4W	
R711	1-247-807-31	CARBON	100	5%	1/4W	
R712	1-249-406-11	CARBON	120	5%	1/4W	F
R713	1-249-406-11	CARBON	120	5%	1/4W	F
R714	1-249-407-11	CARBON	150	5%	1/4W	F
R715	1-249-401-11	CARBON	47	5%	1/4W	F
R716	1-249-417-11	CARBON	1K	5%	1/4W	F
R717	1-249-433-11	CARBON	22K	5%	1/4W	
R718	1-247-895-00	CARBON	470K	5%	1/4W	
R721	1-247-807-31	CARBON	100	5%	1/4W	
R722	1-249-406-11	CARBON	120	5%	1/4W	F
R723	1-249-406-11	CARBON	120	5%	1/4W	F
R724	1-249-407-11	CARBON	150	5%	1/4W	F
R725	1-249-408-11	CARBON	180	5%	1/4W	F
R726	1-249-409-11	CARBON	220	5%	1/4W	F
R727	1-249-410-11	CARBON	270	5%	1/4W	F
R728	1-249-411-11	CARBON	330	5%	1/4W	
R729	1-249-413-11	CARBON	470	5%	1/4W	F
R730	1-249-414-11	CARBON	560	5%	1/4W	F
R731	1-249-413-11	CARBON	470	5%	1/4W	F
R732	1-249-413-11	CARBON	470	5%	1/4W	F
R733	1-249-413-11	CARBON	470	5%	1/4W	F
R734	1-249-413-11	CARBON	470	5%	1/4W	F
R735	1-249-413-11	CARBON	470	5%	1/4W	F

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R736	1-249-413-11	CARBON	470	5%	1/4W F	C253	1-162-306-11	CERAMIC	0.01uF	20%	16V
R737	1-249-413-11	CARBON	470	5%	1/4W F	C254	1-117-793-11	MYLAR	330PF	5%	50V
R738	1-249-413-11	CARBON	470	5%	1/4W F	C255	1-130-467-00	MYLAR	470PF	5%	50V
R739	1-249-413-11	CARBON	470	5%	1/4W F	C256	1-126-960-11	ELECT	1uF	20%	50V
R740	1-249-413-11	CARBON	470	5%	1/4W F	C257	1-126-967-11	ELECT	47uF	20%	16V
R741	1-249-413-11	CARBON	470	5%	1/4W F	C258	1-162-306-11	CERAMIC	0.01uF	20%	16V
R747	1-249-429-11	CARBON	10K	5%	1/4W	C259	1-126-967-11	ELECT	47uF	20%	16V
R749	1-249-429-11	CARBON	10K	5%	1/4W	C260	1-162-306-11	CERAMIC	0.01uF	20%	16V
R751	1-249-429-11	CARBON	10K	5%	1/4W	C261	1-162-306-11	CERAMIC	0.01uF	20%	16V
< SWITCH >						C262	1-162-306-11	CERAMIC	0.01uF	20%	16V
S701	1-554-303-21	SWITCH, TACTILE (SHIFT)				C263	1-162-306-11	CERAMIC	0.01uF	20%	16V
S702	1-554-303-21	SWITCH, TACTILE (TUNING/SELECT +)				C264	1-126-959-11	ELECT	0.47uF	20%	50V
S703	1-554-303-21	SWITCH, TACTILE (TUNE MODE)				C265	1-126-967-11	ELECT	47uF	20%	16V
S704	1-554-303-21	SWITCH, TACTILE (MENU ENTRY ENTER)				C266	1-126-964-11	ELECT	10uF	20%	50V
S711	1-554-303-21	SWITCH, TACTILE (TUNING/SELECT -)				C267	1-162-306-11	CERAMIC	0.01uF	20%	16V
S712	1-554-303-21	SWITCH, TACTILE (MENU ENTRY RETURN)				C268	1-162-294-31	CERAMIC	0.001uF	10%	50V
S713	1-554-303-21	SWITCH, TACTILE (MENU ENTRY MENU)				C269	1-162-306-11	CERAMIC	0.01uF	20%	16V
S714	1-554-303-21	SWITCH, TACTILE (MEMORY)				C270	1-162-282-31	CERAMIC	100PF	10%	50V
S715	1-554-303-21	SWITCH, TACTILE (CHARACTER)				C301	1-130-491-00	MYLAR	0.047uF	5%	50V
S716	1-554-303-21	SWITCH, TACTILE (DISPLAY)				C302	1-126-967-11	ELECT	47uF	20%	16V
S717	1-554-303-21	SWITCH, TACTILE (BAND)				C303	1-130-491-00	MYLAR	0.047uF	5%	50V
S718	1-554-303-21	SWITCH, TACTILE (ANTENNA)				C304	1-162-288-31	CERAMIC	330PF	10%	50V
< VIBRATOR >						C306	1-126-967-11	ELECT	47uF	20%	16V
X701	1-760-422-11	VIBRATOR, CRYSTAL (4.2MHz)				C307	1-130-468-00	MYLAR	560PF	5%	50V
*****						C308	1-130-468-00	MYLAR	560PF	5%	50V
*	A-4398-428-A	MAIN BOARD, COMPLETE				C311	1-106-351-00	MYLAR	2200PF	5%	200V
		*****				C312	1-106-351-00	MYLAR	2200PF	5%	200V
	7-685-872-09	SCREW +BVTT 3X8 (S)				C313	1-126-964-11	ELECT	10uF	20%	50V
< CAPACITOR >						C314	1-126-964-11	ELECT	10uF	20%	50V
C102	1-162-306-11	CERAMIC	0.01uF	20%	16V	C315	1-117-792-11	MYLAR	0.0001uF	5%	50V
C103	1-126-967-11	ELECT	47uF	20%	16V	C316	1-117-792-11	MYLAR	0.0001uF	5%	50V
C104	1-126-967-11	ELECT	47uF	20%	16V	C317	1-126-963-11	ELECT	4.7uF	20%	50V
C200	1-162-306-11	CERAMIC	0.01uF	20%	16V	C318	1-126-963-11	ELECT	4.7uF	20%	50V
C201	1-162-306-11	CERAMIC	0.01uF	20%	16V	C319	1-126-767-11	ELECT	1000uF	20%	16V
C202	1-162-306-11	CERAMIC	0.01uF	20%	16V	C320	1-126-960-11	ELECT	1uF	20%	50V
C203	1-162-306-11	CERAMIC	0.01uF	20%	16V	C321	1-126-960-11	ELECT	1uF	20%	50V
C204	1-162-306-11	CERAMIC	0.01uF	20%	16V	C322	1-126-960-11	ELECT	1uF	20%	50V
C221	1-162-282-31	CERAMIC	100PF	10%	50V	C323	1-126-959-11	ELECT	0.47uF	20%	50V
C222	1-162-306-11	CERAMIC	0.01uF	20%	16V	C324	1-126-960-11	ELECT	1uF	20%	50V
C223	1-162-306-11	CERAMIC	0.01uF	20%	16V	C325	1-126-967-11	ELECT	47uF	20%	16V
C224	1-162-306-11	CERAMIC	0.01uF	20%	16V	C351	1-106-343-00	MYLAR	1000PF	5%	200V
C225	1-126-967-11	ELECT	47uF	20%	16V	C352	1-106-343-00	MYLAR	1000PF	5%	200V
C226	1-162-306-11	CERAMIC	0.01uF	20%	16V	C400	1-162-211-31	CERAMIC	33PF	5%	50V
C227	1-126-956-11	ELECT	0.1uF	20%	50V	C401	1-162-306-11	CERAMIC	0.01uF	20%	16V
C231	1-162-306-11	CERAMIC	0.01uF	20%	16V	C402	1-162-306-11	CERAMIC	0.01uF	20%	16V
C232	1-162-306-11	CERAMIC	0.01uF	20%	16V	C403	1-162-306-11	CERAMIC	0.01uF	20%	16V
C235	1-162-215-31	CERAMIC	47PF	5%	50V	C404	1-126-967-11	ELECT	47uF	20%	16V
C236	1-162-306-11	CERAMIC	0.01uF	20%	16V	C405	1-162-306-11	CERAMIC	0.01uF	20%	16V
C237	1-162-306-11	CERAMIC	0.01uF	20%	16V	C406	1-162-306-11	CERAMIC	0.01uF	20%	16V
C251	1-162-306-11	CERAMIC	0.01uF	20%	16V	C407	1-162-306-11	CERAMIC	0.01uF	20%	16V
C252	1-162-306-11	CERAMIC	0.01uF	20%	16V	C408	1-162-306-11	CERAMIC	0.01uF	20%	16V
						C409	1-162-294-31	CERAMIC	0.001uF	10%	50V
						C410	1-162-306-11	CERAMIC	0.01uF	20%	16V
						C411	1-126-967-11	ELECT	47uF	20%	16V
						C412	1-126-960-11	ELECT	1uF	20%	50V
						C413	1-126-960-11	ELECT	1uF	20%	50V
						C414	1-126-960-11	ELECT	1uF	20%	50V

MAIN

Ref. No.	Part No.	Description	Remark		
C415	1-126-962-11	ELECT	3.3uF	20%	50V
C418	1-162-306-11	CERAMIC	0.01uF	20%	16V
C419	1-162-294-31	CERAMIC	0.001uF	10%	50V
C420	1-162-306-11	CERAMIC	0.01uF	20%	16V
C421	1-130-491-00	MYLAR	0.047uF	5%	50V
C422	1-102-508-91	CERAMIC	10PF	0.5PF	50V
C423	1-102-973-00	CERAMIC	100PF	5%	50V
C424	1-162-306-11	CERAMIC	0.01uF	20%	16V
C425	1-126-964-11	ELECT	10uF	20%	50V
C427	1-106-343-00	MYLAR	1000PF	5%	200V
C428	1-162-211-31	CERAMIC	33PF	5%	50V
C429	1-162-306-11	CERAMIC	0.01uF	20%	16V
C430	1-162-294-31	CERAMIC	0.001uF	10%	50V
C801	1-126-961-11	ELECT	2.2uF	20%	50V
C802	1-162-288-31	CERAMIC	330PF	10%	50V
C803	1-162-306-11	CERAMIC	0.01uF	20%	16V
C804	1-162-291-31	CERAMIC	560PF	10%	50V
C805	1-126-967-11	ELECT	47uF	20%	16V
C806	1-162-306-11	CERAMIC	0.01uF	20%	16V
C807	1-102-852-91	CERAMIC	47PF	5%	50V
C808	1-102-527-11	CERAMIC	82PF	5%	50V
C901	1-101-004-00	CERAMIC	0.01uF		50V
C902	1-101-004-00	CERAMIC	0.01uF		50V
C903	1-126-967-11	ELECT	47uF	20%	50V
C904	1-126-967-11	ELECT	47uF	20%	50V
C905	1-126-953-11	ELECT	2200uF	20%	35V
C906	1-126-969-11	ELECT	220uF	20%	50V
C908	1-126-964-11	ELECT	10uF	20%	50V
C909	1-126-967-11	ELECT	47uF	20%	16V
C910	1-162-306-11	CERAMIC	0.01uF	20%	16V
C911	1-126-959-11	ELECT	0.47uF	20%	50V
C912	1-126-935-11	ELECT	470uF	20%	6.3V
		< FILTER >			
CF201	1-567-389-11	FILTER, CERAMIC			
CF202	1-567-389-11	FILTER, CERAMIC			
CF203	1-567-389-11	FILTER, CERAMIC			
CF231	1-579-554-31	FILTER, CERAMIC			
CF301	1-567-250-11	OSCILLATOR, CERAMIC			
CF402	1-527-981-00	FILTER, CERAMIC			
		< CONNECTOR >			
CNJ301	1-568-250-21	JACK, PIN 2P (LINE OUT)			
		< CONNECTOR >			
* CNP701	1-568-836-11	SOCKET, CONNECTOR 17P			
CNP952	1-766-267-11	PIN, CONNECTOR (PC BOARD) 5P			
		< DIODE >			
D221	8-719-987-63	DIODE 1N4148M			
D251	8-719-987-63	DIODE 1N4148M			
D301	8-719-987-63	DIODE 1N4148M			
D401	8-719-987-63	DIODE 1N4148M			
D402	8-719-987-63	DIODE 1N4148M			
D901	8-719-200-82	DIODE 11ES2			

Ref. No.	Part No.	Description	Remark	
D902	8-719-200-82	DIODE 11ES2		
D903	8-719-200-82	DIODE 11ES2		
D904	8-719-200-82	DIODE 11ES2		
D905	8-719-934-18	DIODE HZS27-2L		
D906	8-719-001-18	DIODE UZL-9M3		
D909	8-719-987-63	DIODE 1N4148M		
D910	8-719-200-82	DIODE 11ES2		
		< GROUND PLATE >		
* EP901	4-942-204-01	PLATE, GROUND		
		< FRONT END >		
FE101	1-233-524-11	ENCAPSULATED COMPONENT		
		(ANTENNA FM 75Ω COAXIAL)		
FE401	1-233-525-11	ENCAPSULATED COMPONENT		
		< IC >		
IC221	8-759-812-35	IC LA1235		
IC251	8-759-812-35	IC LA1235		
IC252	8-759-634-51	IC M5218AP		
IC301	8-759-801-80	IC LA3401		
IC302	8-759-634-51	IC M5218AP		
IC401	8-759-812-45	IC LA1245		
IC801	8-759-169-99	IC SAA6579		
IC901	8-759-820-09	IC LA5667		
		< IFT >		
IFT401	1-404-713-11	TRANSFORMER, IF		
		< COIL >		
L201	1-410-521-11	INDUCTOR	100uH	
L351	1-410-509-11	INDUCTOR	10uH	
L352	1-410-509-11	INDUCTOR	10uH	
L400	1-414-142-11	INDUCTOR	1uH	
L401	1-410-521-11	INDUCTOR	100uH	
		< FILTER >		
LPF301	1-235-164-00	FILTER, LOW PASS		
LPF302	1-235-164-00	FILTER, LOW PASS		
		< TRANSISTOR >		
Q200	8-729-231-20	TRANSISTOR 2SK161-YGR		
Q201	8-729-230-99	TRANSISTOR 2SC2669-OY		
Q202	8-729-230-99	TRANSISTOR 2SC2669-OY		
Q204	8-729-230-99	TRANSISTOR 2SC2669-OY		
Q205	8-729-230-99	TRANSISTOR 2SC2669-OY		
Q231	8-729-030-03	TRANSISTOR DTC144ESA-TP		
Q232	8-729-030-03	TRANSISTOR DTC144ESA-TP		
Q233	8-729-030-03	TRANSISTOR DTC144ESA-TP		
Q234	8-729-620-05	TRANSISTOR 2SC2603-EF		
Q235	8-729-620-05	TRANSISTOR 2SC2603-EF		
Q236	8-729-230-99	TRANSISTOR 2SC2669-OY		
Q237	8-729-230-99	TRANSISTOR 2SC2669-OY		
Q251	8-729-030-03	TRANSISTOR DTC144ESA-TP		
Q301	8-729-141-30	TRANSISTOR 2SC3623A-LK		
Q302	8-729-141-30	TRANSISTOR 2SC3623A-LK		

Ref. No.	Part No.	Description	Remark				Ref. No.	Part No.	Description	Remark			
Q303	8-729-141-30	TRANSISTOR	2SC3623A-LK				R255	1-249-421-11	CARBON	2.2K	5%	1/4W	F
Q304	8-729-141-30	TRANSISTOR	2SC3623A-LK										
Q401	8-729-230-99	TRANSISTOR	2SC2669-OY				R256	1-249-432-11	CARBON	18K	5%	1/4W	
Q402	8-729-231-20	TRANSISTOR	2SK161-YGR				R257	1-249-424-11	CARBON	3.9K	5%	1/4W	F
Q403	8-729-141-30	TRANSISTOR	2SC3623A-LK				R258	1-249-422-11	CARBON	2.7K	5%	1/4W	F
							△R259	1-249-405-11	CARBON	100	5%	1/4W	F
Q404	8-729-141-30	TRANSISTOR	2SC3623A-LK				R260	1-249-439-11	CARBON	68K	5%	1/4W	
Q405	8-729-141-30	TRANSISTOR	2SC3623A-LK										
Q521	8-729-900-89	TRANSISTOR	DTC144ES				R261	1-249-437-11	CARBON	47K	5%	1/4W	
Q522	8-729-821-04	TRANSISTOR	2SA1317-STU				R262	1-249-441-11	CARBON	100K	5%	1/4W	
Q523	8-729-620-05	TRANSISTOR	2SC2603-EF				R264	1-249-431-11	CARBON	15K	5%	1/4W	
							△R265	1-249-405-11	CARBON	100	5%	1/4W	F
Q901	8-729-029-56	TRANSISTOR	DTA144ESA				△R266	1-249-405-11	CARBON	100	5%	1/4W	F
< RESISTOR >													
△R101	1-249-417-11	CARBON	1K	5%	1/4W	F	R268	1-249-433-11	CARBON	22K	5%	1/4W	
△R102	1-249-405-11	CARBON	100	5%	1/4W	F	R269	1-249-441-11	CARBON	100K	5%	1/4W	
△R103	1-249-393-11	CARBON	10	5%	1/4W	F	R270	1-247-883-00	CARBON	150K	5%	1/4W	
R104	1-249-433-11	CARBON	22K	5%	1/4W		R271	1-249-417-11	CARBON	1K	5%	1/4W	F
R105	1-249-437-11	CARBON	47K	5%	1/4W		R272	1-249-417-11	CARBON	1K	5%	1/4W	F
R110	1-247-903-00	CARBON	1M	5%	1/4W		R273	1-249-422-11	CARBON	2.7K	5%	1/4W	F
R111	1-247-903-00	CARBON	1M	5%	1/4W		△R274	1-249-393-11	CARBON	10	5%	1/4W	F
R112	1-247-903-00	CARBON	1M	5%	1/4W		R275	1-247-903-00	CARBON	1M	5%	1/4W	
R200	1-249-408-11	CARBON	180	5%	1/4W	F	R301	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R201	1-249-407-11	CARBON	150	5%	1/4W	F	R302	1-247-883-00	CARBON	150K	5%	1/4W	
R202	1-249-411-11	CARBON	330	5%	1/4W		R303	1-247-883-00	CARBON	150K	5%	1/4W	
R203	1-249-411-11	CARBON	330	5%	1/4W		R304	1-247-878-00	CARBON	91K	5%	1/4W	
R204	1-249-431-11	CARBON	15K	5%	1/4W		R305	1-247-878-00	CARBON	91K	5%	1/4W	
R205	1-249-411-11	CARBON	330	5%	1/4W		R306	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R206	1-249-413-11	CARBON	470	5%	1/4W	F	R307	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R207	1-249-411-11	CARBON	330	5%	1/4W		R308	1-249-426-11	CARBON	5.6K	5%	1/4W	
R208	1-249-433-11	CARBON	22K	5%	1/4W		R309	1-249-426-11	CARBON	5.6K	5%	1/4W	
R209	1-249-411-11	CARBON	330	5%	1/4W		R310	1-249-426-11	CARBON	5.6K	5%	1/4W	
R210	1-249-431-11	CARBON	15K	5%	1/4W		R311	1-249-426-11	CARBON	5.6K	5%	1/4W	
R211	1-249-411-11	CARBON	330	5%	1/4W		R312	1-247-843-11	CARBON	3.3K	5%	1/4W	
R212	1-249-411-11	CARBON	330	5%	1/4W		R313	1-247-843-11	CARBON	3.3K	5%	1/4W	
R213	1-249-433-11	CARBON	22K	5%	1/4W		R314	1-249-409-11	CARBON	220	5%	1/4W	F
R214	1-249-441-11	CARBON	100K	5%	1/4W		R315	1-249-409-11	CARBON	220	5%	1/4W	F
R221	1-249-411-11	CARBON	330	5%	1/4W		△R316	1-249-405-11	CARBON	100	5%	1/4W	F
△R222	1-249-405-11	CARBON	100	5%	1/4W	F	△R317	1-249-405-11	CARBON	100	5%	1/4W	F
R223	1-247-883-00	CARBON	150K	5%	1/4W		R319	1-249-437-11	CARBON	47K	5%	1/4W	
R231	1-249-411-11	CARBON	330	5%	1/4W		R320	1-249-437-11	CARBON	47K	5%	1/4W	
R232	1-249-431-11	CARBON	15K	5%	1/4W		R321	1-249-441-11	CARBON	100K	5%	1/4W	
R233	1-249-411-11	CARBON	330	5%	1/4W		R324	1-249-426-11	CARBON	5.6K	5%	1/4W	
R234	1-249-395-11	CARBON	15	5%	1/4W	F	△R325	1-249-405-11	CARBON	100	5%	1/4W	F
R235	1-249-433-11	CARBON	22K	5%	1/4W		△R326	1-249-405-11	CARBON	100	5%	1/4W	F
R238	1-249-429-11	CARBON	10K	5%	1/4W		R330	1-249-417-11	CARBON	1K	5%	1/4W	F
R239	1-249-429-11	CARBON	10K	5%	1/4W		R331	1-249-417-11	CARBON	1K	5%	1/4W	F
R240	1-249-431-11	CARBON	15K	5%	1/4W		R332	1-249-409-11	CARBON	220	5%	1/4W	F
R241	1-249-429-11	CARBON	10K	5%	1/4W		R333	1-249-409-11	CARBON	220	5%	1/4W	F
R242	1-249-429-11	CARBON	10K	5%	1/4W		R334	1-249-417-11	CARBON	1K	5%	1/4W	F
R243	1-247-807-31	CARBON	100	5%	1/4W		R335	1-249-417-11	CARBON	1K	5%	1/4W	F
△R244	1-249-393-11	CARBON	10	5%	1/4W	F	R350	1-249-381-11	CARBON	1	5%	1/4W	
△R245	1-249-393-11	CARBON	10	5%	1/4W	F	R351	1-249-437-11	CARBON	47K	5%	1/4W	
△R246	1-249-393-11	CARBON	10	5%	1/4W	F	R352	1-249-437-11	CARBON	47K	5%	1/4W	
R251	1-249-411-11	CARBON	330	5%	1/4W		R401	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R252	1-249-437-11	CARBON	47K	5%	1/4W		△R402	1-249-409-11	CARBON	220	5%	1/4W	F
R253	1-249-439-11	CARBON	68K	5%	1/4W		R404	1-249-413-11	CARBON	470	5%	1/4W	F
R254	1-249-421-11	CARBON	2.2K	5%	1/4W	F	R405	1-247-807-31	CARBON	100	5%	1/4W	
							R406	1-247-807-31	CARBON	100	5%	1/4W	

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

MAIN

TRANSFORMER

Ref. No.	Part No.	Description	Remark		
R408	1-249-429-11	CARBON	10K	5%	1/4W
R409	1-249-429-11	CARBON	10K	5%	1/4W
R410	1-249-430-11	CARBON	12K	5%	1/4W
R411	1-249-417-11	CARBON	1K	5%	1/4W F
△ R412	1-249-407-11	CARBON	150	5%	1/4W F
R413	1-249-429-11	CARBON	10K	5%	1/4W
R414	1-249-441-11	CARBON	100K	5%	1/4W
R415	1-247-883-00	CARBON	150K	5%	1/4W
R416	1-249-417-11	CARBON	1K	5%	1/4W F
R419	1-249-422-11	CARBON	2.7K	5%	1/4W F
R420	1-249-441-11	CARBON	100K	5%	1/4W
R421	1-249-417-11	CARBON	1K	5%	1/4W F
R422	1-249-418-11	CARBON	1.2K	5%	1/4W F
R423	1-249-418-11	CARBON	1.2K	5%	1/4W F
R424	1-249-421-11	CARBON	2.2K	5%	1/4W F
R425	1-249-420-11	CARBON	1.8K	5%	1/4W F
R426	1-249-421-11	CARBON	2.2K	5%	1/4W F
△ R429	1-249-393-11	CARBON	10	5%	1/4W F
R430	1-249-441-11	CARBON	100K	5%	1/4W
R521	1-247-843-11	CARBON	3.3K	5%	1/4W
R522	1-249-433-11	CARBON	22K	5%	1/4W
△ R801	1-249-401-11	CARBON	47	5%	1/4W F
R802	1-249-421-11	CARBON	2.2K	5%	1/4W F
R808	1-249-409-11	CARBON	220	5%	1/4W F
R809	1-247-807-31	CARBON	100	5%	1/4W
△ R902	1-247-752-11	CARBON	1K	5%	1/2W F
R903	1-249-441-11	CARBON	100K	5%	1/4W
R904	1-249-437-11	CARBON	47K	5%	1/4W
R905	1-249-437-11	CARBON	47K	5%	1/4W
R906	1-249-437-11	CARBON	47K	5%	1/4W
< VARIABLE RESISTOR >					
RV221	1-241-765-11	RES, ADJ, CARBON	22K		
RV231	1-241-763-11	RES, ADJ, CARBON	4.7K		
RV251	1-241-630-11	RES, ADJ, CARBON	10K		
RV301	1-241-767-21	RES, ADJ, CARBON	100K		
RV402	1-241-630-11	RES, ADJ, CARBON	10K		
< TRANSFORMER >					
T251	1-235-126-00	ENCAPSULATED COMPONENT			
< IFT >					
IFT252	1-404-845-11	COIL, DISCRI (PRIMARY)			
IFT253	1-404-846-11	COIL, DISCRI (SECONDARY)			
< TERMINAL >					
TM401	1-537-897-11	TERMINAL BOARD, PUSH (ANTENNA) 2P			(ANTENNA AM)
< TEST PIN >					
TP251	1-766-275-11	PIN, CONNECTOR (PC BOARD) 2P			
< VIBRATOR >					
X801	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz)			

Ref. No.	Part No.	Description	Remark		
*	1-666-121-11	TRANSFORMER BOARD	*****		
< CAPACITOR >					
△ C951	1-113-915-11	CERAMIC	0.001uF	20%	250V
C952	1-162-306-11	CERAMIC	0.01uF	20%	16V
< CONNECTOR >					
CNP901	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P			
CNP951	1-564-321-00	PIN, CONNECTOR 2P			
< TRANSFORMER >					
△ PT901	1-423-525-11	TRANSFORMER, POWER			

MISCELLANEOUS					

6	1-773-040-11	WIRE (FLAT TYPE) (17 CORE)			
FL701	1-517-177-21	INDICATOR TUBE, FLUORESCENT			
△ PC901	1-558-568-21	CORD, POWER			

ACCESSORIES & PACKING MATERIALS					

	1-501-594-11	ANTENNA (FM)			
	1-501-721-11	ANTENNA (LOOP)			
	1-590-925-31	CORD, CONNECTION (AUDIO 100 cm)			
	3-859-405-11	MANUAL, INSTRUCTION			
		(ENGLISH,FRENCH,SPANISH,PORTUGUESE, GERMAN,ITALIAN,DUTCH,SWEDISH)			

HARDWARE LIST					

#1	7-623-308-07	LW 3, TYPE (A)			
#2	7-621-775-20	SCREW +B 2.6X5			
#3	7-685-874-09	SCREW +BVTT 3X12 (S)			
#4	7-685-872-09	SCREW +BVTT 3X8 (S)			
#5	7-685-132-19	SCREW +BTP 2.6X5 TYPE2 N-S			

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